



MP-03656

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PTO/SB/81 (02-01)
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POWER OF ATTORNEY OR AUTHORIZATION OF AGENT	Application Number	
	Filing Date	
	First Named Inventor	Erik Lier
	Title	PARTLY INTERLEAVED PHASED ARRAYS WITH DIFFERENT ANTENNA ELEMENTS IN CENTRAL AND OUTER REGION
	Group Art Unit	
	Examiner Name	
	Attorney Docket Number	040092-020010US

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I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

SIGNATURE of Applicant or Assignee of Record

Name	Lester W. Schiefelbein, Jr. V.P. and General Counsel Lockheed Martin Space Systems Company - Space and Strategic Missiles d/b/a Lockheed Martin Corporation
Signature	
Date	8.1.03

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of one form is submitted.



MP-03656

Attorney Docket No. 040092-020010US

STATEMENT UNDER 37 CFR 3.73(b)Applicant/Patent Owner: Erik Lier and Anthony W. Jacomb-Hood

Application No./Patent No.: _____ Filed/Issue Date: _____

Entitled: PARTLY INTERLEAVED PHASED ARRAYS WITH DIFFERENT ANTENNA ELEMENTS IN CENTRAL AND OUTER REGIONLockheed Martin Corporation, a Maryland corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____%

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To : _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

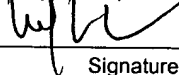
The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

8.1.03

Date

Lester W. Schiefelbein, Jr.

Typed or printed name



Signature

V.P. and General Counsel

Title

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. DE 7108290 v1



Attorney Docket No. 040092-020010US

Form PTO-1595

(Rev. 10-02)

OMB No. 0651-0027 (exp. 5/31/2002)

**Recordation Form Cover Sheet
PATENTS ONLY**U.S. Department of Commerce
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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

Erik Lier and Anthony W. Jacomb-Hood

2. Name and address of receiving party(ies)

Name: Lockheed Martin Corporation

Internal Address:

Street Address: 6801 Rockledge Drive

City: Bethesda

State: MD

ZIP: 20817

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No.

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other:Additional name(s) and address(es) attached? ☐ Yes ☒ NoExecution Date: July 8, 2003

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: July 8, 2003

A. Patent Application No(s):

B. Patent No(s):

Additional numbers attached? ☐ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Chad S. Hilyard
TOWNSEND AND TOWNSEND AND CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
(303) 571-4000

6. Total number of applications and patents involved 1

7. Total fee (37 CFR 3.41): -----\$40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number: 20-1430

(Attach duplicate copy of this page if paying by deposit account)

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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Chad S. Hilyard

Name of Person Signing

Atty. Reg. No. 40,647

Signature

July 22, 2003

Date

Total number of pages including cover sheet, attachments and documents: 2

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ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Erik Lier of 130 Twining Bridge Road, Newtown, PA 18940 and Anthony W. Jacomb-Hood of 876 Henry Drive, Yardley, PA 19067, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: PARTLY INTERLEAVED PHASED ARRAYS WITH
DIFFERENT ANTENNA ELEMENTS IN CENTRAL AND
OUTER REGION

Date(s) of execution of Declaration: July 8, 2003

Filing Date: July 22, 2003

Application No.: 10/625,810 ; and

WHEREAS, Lockheed Martin Corporation, a corporation of the state of Maryland, located at 6801 Rockledge Drive, Bethesda, MD 20817, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;


For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation, or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

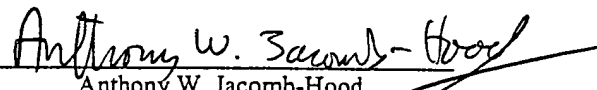
Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 7-8-03


Erik Lier

Dated: 8 July 2003


Anthony W. Jacomb-Hood